

SIR MATTHEW HALE ON THE NATURE OF KNOWLEDGE AND THE RELATION OF NATURAL TO SUPERNATURAL THEOLOGY

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GIVEN THE BROAD GRASP of a wide variety of disciplinary areas, ranging from jurisprudence to natural philosophy, natural theology, and Christian doctrine, evidenced in the works of Sir Matthew Hale, his thought offers a nearly unique point of entry into the inter- or multi-disciplinary sensibilities of scholars in the early modern era.¹ More specifically, Hale offers a significant point of entry into the thought-world of the seventeenth-century on issues of epistemology in relation to philosophy and theology and on the issue of the relationship between natural and scriptural knowledge of God. His work, situated contextually, evidences a strong impulse toward natural theology based on the increasing sense of order and purpose in the universe both on the immense and on the minute scale that was identified in the work of members of the Royal Society like Robert Boyle,² with whose work Hale was well acquainted.

1. On Hale and his work, see Gilbert Burnet, *The Life and Death of Sir Matthew Hale, K^t Sometime Lord Chief Justice of the King's Bench* (London: William Shrowsbery, 1681); and Richard Baxter, *Additional notes on the life and death of Sir Matthew Hale, the late universally honoured and loved Lord chief Justice of the Kings Bench* (London: for Richard Janeway, 1682); Alan Cromartie, *Sir Matthew Hale 1609-1676: Law, Religion, and Natural Philosophy* (Cambridge: Cambridge University Press, 1995); David Sytsma, "Matthew Hale as Theologian and Natural Law Theorist," in Mark Hill and R. C. Helmholz, ed., *Great Christian Jurists in English History* (Cambridge: Cambridge University Press, 2017), 163–186; also note Henry Flanders, "Sir Matthew Hale," in *University of Pennsylvania Law Review and American Law Register*, 56/6; N.S. 47 (1908), pp. 384-394; and Margaret T. Hogdan, "Sir Matthew Hale and the 'Method' of Invention," in *Isis*, 34/4 (1943), pp. 313-318; also see the extended comments on Hale as a legal scholar and lawyer in William Holdsworth, *A History of English Law*, 3rd ed., 16 vols. (London: Methuen, 1922–1938), VI, pp. 574–595; and idem, "Sir Matthew Hale," in *Law Quarterly Review*, 39 (1923): 402–426. Note Voetius' multi-disciplinary recommendations for study as described in Richard A. Muller, *After Calvin: Studies in the Development of a Theological Tradition* (New York: Oxford University Press, 2003), 110–116.

2. See Jan W. Wojcik, "The Theological Context of Boyle's *Things above Reason*," in Michael Hunter, ed., *Robert Boyle Reconsidered* (Cambridge and New York: Cambridge University Press, 1994), pp. 139-155; Timothy Shanahan, "Teleological Reasoning in Boyle's *Disquisition about Final Causes*," in *ibid.*, pp. 177-192; and Richard A. Muller, "God and Design in the Thought of Robert Boyle," in Christopher Firestone and Nathan Jacobs, eds., *The*

Hale's work on natural theology represents one of several types of essays in natural theology undertaken by Reformed writers in the seventeenth century. It is not a primarily apologetic work, nor does it argue the superiority of Christianity over other religions—and it does not adumbrate the later rationalist model of providing a prologue to and foundation for revealed theology. Rather it sets forth an extended discussion of human knowing, moves on to arguments concerning causation and the necessity of a first cause, and then offers a basic positive exposition of the contents of natural theology: existence and attributes of God, the works of God in creation and providence, the excellence of man among the creatures, the end of humanity rationally considered and the means of attaining that end, including the incapability of natural means. This does lead Hale to an argument concerning the “credibility” of Scripture as means to that end, but the argument is not apologetic. Given that the work is juxtaposed, in the same volume, with an exposition of sacred doctrine, it also affords a significant opportunity to identify the relationships and distinctions between natural and sacred theology in early modern Reformed thought.

1. Sir Matthew Hale: jurist, philosopher, and theologian.

The English philosopher-theologian and sometime Chief Justice of the King's Bench, Sir Matthew Hale (1609-1676), was a graduate of Magdalen Hall, Oxford, and in his time recognized as a scholar of incredibly wide learning in science, law, philosophy, and theology. He was, even on the basis of his published works, a prolific author; and when to these is added a catalogue of the manuscript volumes located in the Lambeth Palace Library, his output in all fields was enormous.³

He was trusted and respected both for his scholarship and for his piety by English Reformed, whether Puritan or Anglican, and Latitudinarian thinkers alike. His religious thought, in its development, falls between these two poles, but certainly in his doctrinal writing, it is Reformed and partakes of the scholastic learning of the era.⁴ Hale's philosophical perspective, moreover, partook of the new experimental philosophy, of a more traditional modified Aristotelianism, and evidenced some interest in contemporary atomism and in the vitalist theories of the van Helmonts, at the same time that it resisted and critiqued the thought of Descartes, Gassendi, and Hobbes.⁵

Hale did not, moreover, cordon off one disciplinary interest from another—a characteristic of his work illuminates the interrelation and distinction of philosophy

Persistence of the Sacred in Modern Thought (Notre Dame: University of Notre Dame Press, 2012), 87–111.

3. See Cromartie, *Sir Matthew Hale*, 240–244; and Sytsma, “Matthew Hale as Theologian and Natural Law Theorist,” 169, 172–175, detailing the unpublished theological works.

4. Cf. Cromartie, *Sir Matthew Hale*, 140–142; with David Sytsma, “General Introduction,” in Matthew Hale, *Of the Law of Nature*, ed. with an intro. by David S. Sytsma (Grand Rapids: CLP Academic, 2015), xiv–xxiv.

5. Sytsma, “General Introduction,” xxi–xxiii.

and theology as understood in the mid-seventeenth century, including the specific interrelationship and distinction of natural and sacred theology. By way of example, Hale's treatise on the law of nature begins with a general definition of law that stresses its imposition by authority, its requirement of obedience, and its connection of commands with legal sanctions—a definition on which he expands in order to distinguish laws from rules, including rules relating to “all kind Naturall and Artificiall Actions.”⁶ This distinction eventually leads Hale to the point that “Epicurists and Atheists” who appeal to “Reason, & the Law of Reason” in order to identify human beings as rulers or lords of themselves, capable of absolving themselves from obligation, fail to respect the distinction between rule and law: what makes the law of nature a law is that it is communicated by God as “the Supream Legislator of the World.”⁷ Hale's scientific treatise on the “principles of natural motion,” opposed the Epicurean atomist assumption of self-moved matter both on grounds of the necessity of the divine First Mover and the Aristotelian principle that “whatever is moved, is moved by another.”⁸

His discourses *Of the Nature of True Religion*, in addition to looking toward the ultimate divine end of religion stress both the need of religion “for the right Government of man” and the dangers of “*turning of the greatest part of Religion in to Politick Contrivances, for attaining or upholding Power, Wealth, or Interest.*”⁹ Similarly, Hale's work on *The Primitive Origination of Mankind*, although concerned to argue the case rationally, “according to the light of Nature,” took into consideration “the *Mosaical System ... abstractively considered*” on the issue of origins and adopted a clearly apologetic stance over against the “Atheism” of his times—marking it as “unreasonable” and “abhorrent to the Light of Nature.”¹⁰ Even so, Hale's work on natural and revealed theology, *A Discourse of the Knowledge of God, and of Our Selves*, takes on two disciplines with an interest in their relation and distinction. The work indicates, in its basic division into a discourse on knowledge gained “by the light of nature” and a discourse on knowledge gained “by the sacred Scriptures,” a clear sense both of the usefulness of natural theology and of its limits—as well as offering a well-argued early modern view of what natural and sacred theology have in common and how they differ.¹¹

6. Hale, *Of the Law of Nature*, 6.

7. Hale, *Of the Law of Nature*, 8.

8. Matthew Hale, *Observations Touching Principles of Natural Motions, and Especially Touching Rarefaction & Condensation: Together with a Reply to Certain Remarks Touching the Gravitation of Fluids* (London: W. Godbid for W. Shrowsbury, 1677), 2–7.

9. Matthew Hale, *Of the Nature of True Religion, the Causes of its Corruption, and the Churches Calamity, by Mens Additions and Violences: With the Desired Cure. In Three Discourses* (London: for B. Simmons, 1684), fol. A4v, pp. 3, 9.

10. Matthew Hale, *The Primitive Origination of Mankind, Considered and Examined According to the Light of Nature* (London: William Godbid, 1677), fol. a1v.

11. Sir Matthew Hale, *A Discourse of the Knowledge of God, and of Our Selves I. by the Light of Nature, II. By the Sacred Scriptures Written by Sir Matthew Hale, Knight ... for His*

2. “The best Part and truest Use of all Philosophy.”

Hale’s works, including all that address scientific, philosophical, and legal matters, take an overtly theistic stance and consistently express Hale’s assumption that the best exercise of reason must serve ultimately to glorify God. He quoted an unnamed “excellent Naturalist” of the era, to the effect that “A little knowledge in Philosophy may perchance make a proud and empty man an Atheist, but it is impossible that Atheism can lodge in the Mind well studied and acquainted with Natural Philosophy.”¹² Philosophical inquiry has, of course, its own intrinsic merits and uses, but they cohere with the religious or theistic use. One of Hale’s deepest concerns, evident in his scientific, theological, and philosophical works, was—as indicated by the title of one of his manuscripts—“Concerning humane reason and learning in matters of Religion.”¹³

This connection is clear from Hale’s approach to the choice of one’s object or objects of inquiry out of the “great multiplicity” of possible objects of study. There are three basic “qualifications” that “commend an Object to a Man’s Enquiry”:

First, the nobleness and worth of an Object: Secondly, the usefulness of this Object being known, or of the knowledge of it: Thirdly, sufficient certainty touching the Object, or the knowledge of it: Fourthly, that the Object be such as may be large enough to satisfie the Intellective Faculty, and yet not distract it through its multiplicitie, vastness, or extent.¹⁴

The worth of an object of inquiry is, in the first place determined by whether it is “worthy of the Faculty that is employed about it,” both in the sense that the object is suited to the operation of the faculty and in the sense that the investigation of the object enriches the faculty. Accordingly, even the tiniest object in nature can be worthy of investigation because it advances knowledge, reveals the usefulness of something, or because the investigation leads beyond the object to something higher. The second criterion is similar. Hale stresses that the nobleness of the object and of knowledge of it ought also to coincide with a usefulness of the knowledge: he notes how little has been gained from the enormous efforts of some minds to square the circle or duplicate a cube or from other pursuits that have no use or application, whether physical or spiritual. Natural philosophy, Hale was convinced, demonstrated that some things are not only “noble in themselves” but “have also at least a mediate and preparatory

Private Meditation and Exercise; to Which Are Added, a Brief Abstract of the Christian Religion, And, Considerations Seasonable at All Times, for the Cleansing of the Heart and Life, by the Same Author (London: for William Shrowsbery, 1688).

12. Hale, *Primitive Origination*, Li (p. 5).

13. Lambeth MS 3509, pp. 122–125. My thanks to David Sytsma for sharing with me his copy of this text, as well as of Hale’s manuscript, “That reason not a sufficient in guide in matters of fayth” Lambeth MS 3506, pp. 101–108.

14. Hale, *Primitive Origination*, Li (p. 4).

usefulness to Mankind” by directing the observer by way of their own “Qualities and Operations,” by the “connexion of Causes and Effects,” and by “observation of the Order of things in Nature” toward consideration and “admiration of the Great Efficient and Governor of the World.”¹⁵ Natural philosophy, then, provides “a deep impression of Natural Religion ... and of all those consequents that arise in the Mind and Life from this habit of Religion.”¹⁶

Hale’s third criterion of worthiness is arguably the most significant in relation to the issue of epistemology, whether in regard to the philosophical knowledge of the object itself or in regard to the ultimate direction taken as a result of the knowledge.¹⁷ Subjects that are characterized by doubtful evidence and uncertainty of analysis or argument may well appear quite sublime, but they will leave “an impartial and serious Mind full of doubt and dissatisfaction” and lead a “self-conceited” person into “Suppositions” that are “nothing but dust and smoke as soon as their evidence is impartially examined.”¹⁸ Among such topics, Hale places questions of the plurality of worlds, the inhabitants of other planets, and the Cartesian speculation concerning material “vortices” that account for planetary motion.

A proper and useful examination of natural causes in the universe, however, has the benefit of exercising the intellect, delighting the mind, and yielding “excellent discoveries” even when knowledge remains ultimately incomplete. Such investigation, properly prosecuted will also provide “a great discovery of the admirable Wisdom and Power of God in framing and ordering of the World, and so becomes a manduction to the knowledge, acknowledgement, and adoration of Him.”¹⁹ This grand vision of the divine ordering of the world did not, however, in Hale’s view require obviously grand objects: he comments that “the philosophy of a fly or a worme ... would afford matter enough for a most exquisite naturalist all his lyfe,”²⁰ a point echoing Robert Boyle’s teleological comment on the eye of a fly.²¹

The relationship between philosophy, including natural philosophy as well as metaphysics, and theology is well summarized in Hale’s comments on “The best Part, and truest Use of all Philosophy” or as he also put it, “the best, and truest, and noblest part of true Philosophy”: this part of philosophy is concerned with “the carrying up of the admirable Works of Nature, and their Regiment, to the Supreme Cause of all Things; and the glorifying of that God that hath instituted, and still continues that Law

15. Hale, *Primitive Origination*, Ii (p. 5).

16. Hale, *Primitive Origination*, Ii (p. 5).

17. Hale, *Primitive Origination*, Ii (p. 7).

18. Hale, *Primitive Origination*, Ii (p. 7).

19. Hale, *Primitive Origination*, Ii (p. 8).

20. Hale, “Concerninge humane reason and learning in matters of Religion,” Lambeth MS 3509, p. 123.

21. Robert Boyle, *A Disquisition about the Final Causes of Natural Things: Wherein it Is Inquir’d Whether, and (If at All) with What Cautions, a Naturalist Should Admit Them? ... to Which Are Subjoyn’d, by Way of Appendix Some Uncommon Observations about Vitiated Sight* (London: H. C. for John Taylor, 1688), 44.

and Order, which we call the Law of Nature.”²² These sentiments, too, echo Boyle.²³ To this end, moreover, human beings are not only endowed with senses “to behold the Works of Nature, but also with an Intelligent, Inquisitive, and Reasonable Soul” capable of discerning the order in all of the works of nature. The creation, then, is, as it were, a temple, in which human beings have been placed as priests, called upon to praise and glorify the creator on behalf of all creatures.²⁴

The emphasis, then, is never on knowledge *per se* but on rightly ordered truths that convey the “various degrees of usefulness” of the objects known. He comments that a person may be adept in such advanced disciplines as mathematics and natural philosophy and still be a “bad” person, if his knowledge is not “right and true.” True knowledge has a direct effect on the knower, improving both intellect and will, rendering the knower not only more knowledgeable, but also more wise, generally a better person, more moral, more religious.²⁵ There is also an eschatological dimension to Hale’s view of knowledge, given his belief in the immortality of the soul. It is not as if truth merely enriches and directs life in the world. The knowledge of God that comes by way of true knowledge in this life will also serve the soul beyond death. Hale is convinced that the knowledge gained from the natural order and from rational investigation that had improved the soul “in this Life” will be carried with it “to the next World”—drawing on language found in Augustine and in the Reformed theological prolegomena of the era, Hale adds, “what is serviceable and useful for the present Life *in via*” may well be “proportioned to that state that is *in patria*.”²⁶

3. Hale’s views on knowledge, natural and supernatural.

The purpose and direction of Hale’s works on natural theology and religion stand in general in accord with that of contemporaries like William Bates and Richard Baxter. Hale was a close colleague and friend of Baxter—and it was Baxter who saw to the posthumous publication of Hale’s treatise *Of the Nature of True Religion* (1684).²⁷ Although he does not use the terminology of “natural” and “supernatural theology,” Hale’s usage belongs to the first category of definition that we have identified, namely, the definition of natural theology as distinct from supernatural or sacred theology and

22. Matthew Hale, *Magnetismus magnus, or, Metaphysical and divine contemplations on the magnet, or loadstone* (London: for William Shrowsbury, 1695), 2.

23. Cf. Robert Boyle, *Some Considerations Touching the Usefulness of Experimental Naturall Philosophy, Propos’d in a Familiar Discourse to a Friend by Way of Invitation to the Study of It* (Oxford: Henry Hall, 1663), 29.

24. Hale, *Magnetismus magnus*, 3.

25. Hale, *Primitive Origination*, I.i (p. 6).

26. Hale, *Primitive Origination*, I.i (p. 7).

27. Publication of the posthumous *Discourse of the Knowledge of God, and of Our Selves* (1688), although sometimes also identified as an effort of Baxter (e.g., Cromartie, *Sir Matthew Hale*, p. 141), is more likely the work of Edward Stephens, as argued by Sytsma, “General Introduction,” xv, n. 27.

as grounded in reason or, more properly, in ratiocination concerning the nature of the creation and of the divine handiwork in it.²⁸ His work does not, therefore, embody all of the apologetic interests of his friend Baxter's *Reasons of Christianity*, although, arguably, it rests on very similar presuppositions concerning the relationship of reason and revelation.²⁹

Hale also became rather wary of what he took to be excessive speculation in theology, a "mischief of *Scholastics*," when it violated his third criterion for a proper object of knowledge, namely, "sufficient certainty touching the Object, or the knowledge of it." He held that discussion of the divine decrees, of the manner or mode of divine foreknowledge of future contingents, the way in which three divine persons subsist in the unity of the divine essence, and other points in theological debate were as far from the capabilities of the wisest persons as abstruse questions in philosophy were from the grasp of three year old child—and, as incapable of being suitably known, also useless to religion.³⁰ To the response that "Physicians and Naturalists" engage in speculations about human generation, digestion, and the "motions" of the humors in the body, he observed that these did have a basis for "sufficient certainty" by way of "Dissection and Observation" and were of use in medical practice.³¹ In short, his work in all fields was based on a clear sense of what could be known and how it could be known.

Like many of his Reformed contemporaries, Hale did not hold to a theory of innate ideas, but rather viewed the soul either as *apta nata* to receive by way of sense impressions of things external to it or as capable of receiving truths ingrafted or implanted by God. Further, in accord with his appreciation of the inductive aspects of the Aristotelian tradition, Hale understood knowledge as the adequation of the mind to the thing known. In Hale's words, "*Knowledge* is nothing else but the true impression and shape of the thing known in the Understanding, or a conception conform to the thing conceived."³² The soul by nature is not only capable of receiving via the senses impressions of things external to it, it also by nature desires and works to effect these impressions. This knowledge requires, however, that its "Object be some way applied to it," for without the object begin presented, knowledge is "as impossible ... as for a Looking-glass to reflect without first uniting of a Species of some Body to it, that it may be reflected."³³ More directly, the knowable thing, the *scibile*, must be "united to the Soul" in order for knowledge to arise—and there must also therefore be some means by which this union can occur.

28. Hale, *Discourse of the Knowledge of God*, I.i (p. 2).

29. On Baxter's understanding of reason and revelation, see David Sytsma, *Richard Baxter and the Mechanical Philosophers* (New York: Oxford University Press, 2017), 92–98.

30. Hale, *Of the Nature of True Religion*, 6.

31. Hale, *Of the Nature of True Religion*, 7.

32. Hale, *Discourse of the Knowledge of God*, I.i.1 (p. 1).

33. Hale, *Discourse of the Knowledge of God*, I.i. (pp. 1-2); cf. Cromartie, *Sir Matthew Hale*, 142.

Hale enumerates three means of knowing, supernatural, artificial, and natural—all found among human beings generally. By supernatural, Hale intended “Principles of Truth” implanted by God in the soul as aspects of the image of God. As implanted—namely, not innate—these principles are not essential to the soul and therefore are corrupted and decayed after the fall.³⁴ As Hale argued elsewhere, the human intellect “cannot rise to supernaturall operation without a supernaturall grace infused into the soul.”³⁵ Nonetheless, these implanted principles or “common notions,” are so inscribed or engraved on the soul by God that they belong to its permanent constitution, including “those important Principles of truth and morall righteousness, that are suitable and necessary to the well being of the reasonable Nature, and certain secret tendencies or propensions to close with moral good, and to fly from and avoid the contrary.”³⁶ Elsewhere Hale added to this view of principial knowledge implanted by God a more the Platonic theory of the divine “agent intellect” as an ongoing means of illumination distinct from the implantation of common notions,³⁷ yielding a fourfold communication or “promulgation” of the natural law: “1. By a common irradiation [viz., the agent intellect]; 2. By institution of implanting; 3. By ratiocination or the exercise of the intellective faculty in Man; 4. By that vigorous application of the former *media* which we ordinarily call Conscience.”³⁸ Given the “continual strife” of the spirit and the flesh, these principles are neither irresistible nor “exempted from the dominion of the will and ... the impetuousnes and violence of the sensuall appetite.”³⁹

By “artificial” knowledge, Hale means knowledge through writing, speech, or some other kind of sign, knowledge that is communicated from one human being to another. Here Hale includes “the Reliques of the knowledge of God in *Adam* [that] were derived to his Posterity,” a view of the traditionary transmission of knowledge after the fall that Hale held in common with many of his Reformed predecessors and contemporaries, including Calvin and Bullinger.⁴⁰ The third category, natural knowledge, is where Hale offers his basic epistemology. He identifies, in accord with the Peripatetic tradition of his day, “three branches” of natural knowledge, “simple apprehensions, “complex apprehensions,” and “conclusions,”⁴¹ a basic epistemology

34. Hale, *Discourse of the Knowledge of God*, I.i. (p. 2).

35. Hale, “That reason not a sufficient guide,” Lambeth MS 3506, p. 104.

36. Hale, *Of the Law of Nature*, 143, 144–145.

37. Hale, *Of the Law of Nature*, viii (pp. 122–142) and Sytsma’s introduction in *ibid.*, xlix–l.

38. Hale, *Of the Law of Nature*, viii (p. 122), semicolons added for clarity. Hale’s third category here, “ratiocination” references what the *Discourse* subsequently identifies as “complex apprehensions” and “conclusions”: cf. *Discourse of the Knowledge of God*, I.i (p. 3)

39. Hale, *Of the Law of Nature*, 147.

40. Hale, *Discourse of the Knowledge of God*, I.i. (p. 2); cf. Hale, *Of the Nature of True Religion*, p. 2; also note Calvin, *Commentary on Genesis, argumentum*, in *CO*, col. (*CTS Genesis*, I, p. 59); and Bullinger, *Decades*, I.i (I, pp. 39–40, 42–46); and Cormartie, *Sir Matthew Hale*, 142–143.

41. Hale, *Discourse of the Knowledge of God*, I.i. (pp. 2–3); also see Hale, *Primitive Origination of Mankind*, pp. 50–51; cf. the similar approach to knowing in Zanchi, *De operibus Dei*, Pars. III, II.vii (cols. 636–638); and note the translation of the passage in David Sytsma,

that he shared with his contemporaries, whether natural philosophers or theologians,⁴² and to which he would return in his treatise *Of the Law of Nature*.⁴³

Thus, in addition to the divinely implanted principles, often identified as common notions, acquired knowledge in the basic form of simple apprehensions,⁴⁴ consists in impression of an object or sense in the imaging faculty or “fantasy” in the most rudimentary way: the object is presented to the intellect or understanding “without either affirming or denying any thing concerning it.”⁴⁵ In other words, the initially and most basic apprehension of an object is viewed as a rudimentary form of knowing without any further differentiation or distinction such as occurs by the addition of conceptual qualifications. Such knowledge is, by definition, non-propositional because it is pre-propositional.

The next level, complex apprehensions, is a basic form of propositional knowledge according to which two “knowables” or *scibilia* are conjoined either in affirmation or negation. There are, moreover, two distinct kinds of propositions that arise from complex apprehension—those concerning the existence of a thing, viz., “that it is”; and those concerning the essence of a thing, viz., “what it is.”⁴⁶ The former is more simple and immediate, arising from the initial relationship between a perceived object and the understanding and resulting in general propositions. The latter more “complex and remote,” and itself distinguished into two subordinate kinds of proposition, albeit both reached without significant “Discourse or Ratiocination.” The first arises when different particulars of the same subject conjoin, as in the proposition “the Man is red; the Man and the red, being both objects of Sense, and meeting in the same subject.”⁴⁷ The second arises concerning things that “that do not immediately fall within our Senses,” such as “the Man is a substance” or “the Spirit is a substance.”⁴⁸

Finally, third, there are “conclusions” that can be drawn from either kind of apprehension, the simple or the complex, on the basis of “rational discourse.” This

“Herman Bavinck’s Thomistic Epistemology: the Argument and Sources of his *Principia of Science*,” in John Bolt, ed., *Five Studies in the Thought of Herman Bavinck, A Creator of Modern Dutch Theology* (Lewiston, NY: Edwin Mellen, 2011), 49–55.

42. Note the parallel in Richard Baxter, *A Treatise of Knowledge and Love Compared. In Two Parts: I. Of Falsely Pretended Knowledge. II. Of True Saving Knowledge and Love* (London: for Thomas Parkhurst, 1689), 29; Theophilus Gale, *The Court of the Gentiles. Part IV. Of Reformed Philosophie. Wherein Plato’s Moral and Metaphysic or Prime Philosophie is reduced to an useful Forme and Method* (London: Printed by J. Macock for Thomas Cockeril, 1677), *Proemial Scheme*, pp. 5–13; and Turretin, *Instituto theologiae elencticae*, I.iii.11.

43. Hale, *Of the Law of Nature*, 122–124, 144–147, 166–171.

44. Cf. Reynolds, *Treatise of th Passions*, xxxvii (pp. 455–456).

45. Hale, *Discourse of the Knowledge of God*, I.i. (p. 2); cf. Cromartie, *Sir Matthew Hale*, 142.

46. Hale, *Discourse of the Knowledge of God*, I.i. (pp. 2–3).

47. Hale, *Discourse of the Knowledge of God*, I.i. (p. 3).

48. Hale, *Discourse of the Knowledge of God*, I.i. (p. 3); cf. Cromartie, *Sir Matthew Hale*, 143.

discourse is a “faculty or power” belonging to human beings distinguishing them from other “visible creatures” and providing guides to human action and improvements in human knowledge. Whether in logical argument or in the examination of things, this process can move from effects to causes.⁴⁹ Hale was, it must be remembered, a member of the early modern scientific community as well as a legal scholar and a philosophical theologian—and his scientific works consistently involved experiment and induction, moving from observed effects to conclusions.⁵⁰ One way that Hale also describes this third level of knowing is that it proceeds by the gathering and compounding of the propositional knowledge gained as complex apprehensions through a process of “Ratiocination and Discourse” that draws conscious rational conclusions from the propositions—potentially in syllogistic form.⁵¹

Hale also recognized that this analysis of rational process is not always “explicit” in human beings and ought not to be applied as a construct to all human thought processes—any more than it ought to be used to explain the actions of a hungry horse that “comes to good pasture”: the horse does not say to itself, the pasture is grass; but grass is good to eat; therefore this pasture is good to eat. Neither is human reasoning always by “explicit or formed syllogisms, or artificial Moods and Figure,” inasmuch as “some consecutions are so intimately and evidently connexed to or found in the premisses, that the conclusion is attained *quasi per saltum*, and without any thing of ratiocinative process, as the Eye sees his object immediately and without any previous discourse; so in objects intellectual many evident truths or principles are *primo intuitu* assented unto.”⁵² This argument, moreover, relates directly to the issue of common notions which “as the first Stock and Object of our reason saves the rational faculty much Labour”: these truth could be discovered by rational process but they are known “by a kind of intuition *tota simul*.”⁵³

The “power” of rational discourse, when engaged in a fully conscious and determinate manner, is “beyond” the capability of “all other visible Creatures” and provides human beings with a guide in all matters, whether “Civil or Religious”—and its engagement stands at the basis of the natural theology that Hale proposes to argue, citing Romans 1:20 for support:

This is that Power, whereby we may improve even sensible Objects, Apprehensions, and Observations; to attain more sublime and high discoveries, and rise from Effects to their Causes, till at last we attain to the *first Cause* of all things. So we may conclude that the Knowledge of our Creator, though it fall not within the reach of our Sense; and so falls not immediately within the reach of our Understanding, yet by the ascents and steps of Rational Discourse, so much may be gatherd, as may leave and

49. Hale, *Discourse of the Knowledge of God*, I.i. (p. 3).

50. Cf. e.g., Hale, *Observations Touching Principles of Natural Motions*, 36–49.

51. Hale, *Primitive Origination of Mankind*, 51.

52. Hale, *Primitive Origination of Mankind*, 51; similarly, idem, *Of the Law of Nature*, 169.

53. Hale, *Of the Law of Nature*, 169.

Atheist without excuse. God having given to Man, even in his lapsed condition, besides other Providential helps, a stock of Visibles, and a Rational Faculty to improve that stock to some measure of the Knowledge of himself.⁵⁴

The use of discursive reason, moreover, must be engaged humbly, avoiding a neglect of the divine gift of reason but also avoiding excessive curiosity: the light of reason should be used, in short, “to that end for which it was principally intrusted with us, even the knowledge of our Creator.”⁵⁵ The argumentation points directly toward the beginning of Hale’s natural theology proper, with its focus on the identity of God as first cause. (It may be objected that sense knowledge and the intellectual processing of sense knowledge can be fallible—but as Richard Baxter observed, this “is the *first and only entrance* of all things *sensible* into the mind or knowledge of man”: there is “no other way to perceive ... Objects.”⁵⁶)

This theory of knowing favors a *a posteriori* argumentation and offers what is a basically *a posteriori* way of approaching immediate or intuitive knowing, whether in theology or philosophy, and explains Hale’s rejection of much of the argumentation of the new philosophies, notably Cartesianism. As his dialogue partner Baxter observed these philosophies confounded truth “by taking up Logical Notions first which are unsuitable to true Physical beings.”⁵⁷ Hale specifically distinguished between two kinds of method in rational enquiry:

some begin at their senses, examine particular Matters of Fact, how they are, or fall out, search into Experiments and visible Trials, and those Appearances of Nature that are obvious to our Senses, and from these they deduce their Conclusions and Theorems. ... Again, there are some that lay the first Foundations of their Philosophy in Notions, and Speculations, and preconceived Systemes of their own framing; and then conforming the Solution of the Phaenomena in Nature, to those Notions. And these most commonly do by Nature and Natural Appearances, as that Tyrant did by his Prisoners that were too long or too short for his Iron Bed; so these handle the Phaenomena in Nature; torture and torment them into a consonancy to their Notions; or at best, substitute new precarious Notions to piece out their Hypotheses, and to render sensible Appearances to hold analogy with that Notional Systeme of things that they have framed.⁵⁸

Taken out of context, Hale’s remarks might well be thought of as a standard complaint made by a proponent of one or another of the new rational philosophies of the seventeenth century against the older purportedly speculative Aristotelianism. The

54. Hale, *Discourse of the Knowledge of God*, I.i. (pp. 3–4).

55. Hale, *Discourse of the Knowledge of God*, I.i. (p. 4).

56. Baxter, *Treatise of Knowledge and Love*, 35.

57. Baxter, *Christian Directory*, III, q. 173, §13 (1673, p. 919).

58. Hale, *Observations Touching Principles of Natural Motions*, fol. A5r.

opposite is in fact the case. It is Aristotle that Hale identifies as “the greatest Master of Experience and Observation” and who Hale views as misrepresented by critics because “either they have not considered him, or surely are too injurious to him.” By contrast, it is the modern rationalists, whether the purer Democritans, Lucretians, and Epicureans, or those like Descartes and Gassendi who had attempted to restore and reform ancient atomism,” who are guilty of “a very uncertain and preposterous way of forming Conclusions.”⁵⁹

In the final two chapters of his discourse on the natural knowledge of God, Hale returns to the problem of knowing, commenting that “It is true, that by the strength of Reason, we do find out divers Truths of a high Nature, concerning God and his Works,” but adds that in discerning these “high” truths we also recognize three major problems. They are, in the first place, attained only with “a great deal of difficulty” and in fact are virtually inaccessible “without some pre-existent means of discovery,” namely, by means of “some Tradition or Revelation, and so we rather assert the Truths discovered to our hands, than discover them.”⁶⁰ Arguably, Hale here gently asserts the point recognized in a large number of Reformed prolegomena, that natural theology, to be a form of true theology, must belong to the paradigm of revealed theologies and also draw on a tradition of Christian meditation on its topics. Further, the rational discernment of truths concerning God and his works also includes a sense of “confusion, darkness, and disorder” as well as grounds for distrusting much of what has been discovered. What natural theology entails, therefore, in its very discovery of truths is that there must also be “divers Truths, that infinitely concern us, that all our Inquiry shall never discover, without some extrinsical help of a higher nature than Sense.”⁶¹ This extrinsic source, moreover, must be capable of overcoming defects both of intellect and of will—in short, there must be divine revelation that subdues “the Understanding to believe, and the Will to obey.”⁶²

With these considerations in place, Hale moves on to his treatment “Of the Credibility of the Sacred Scriptures,” not as the initial chapter of his discourse based on Scripture, but as the culminating chapter of his discourse on the light of nature: having argued the limitation and defect of the natural light, he provides the foundation for the subsequent deployment of his scriptural theology. He remarks that the truths of Christian theology could be drawn “by easie consequence,” indeed, by an *a priori* argument “from the Cause to the Effect,” if Scripture were to be clearly shown to be the Word of God. If Scripture is recognized as the Word of God, its truth will be “beyond all disputation” and doctrine based on it “will need no proof.”⁶³ Although this chapter on the credibility of Scripture concludes the discourses on natural theology and proposes rational argumentation, the pattern of argument is not the rationalistic, evidentialist pattern that would become common in the eighteenth century. Instead, it

59. Hale, *Observations Touching Principles of Natural Motions*, fol. A5r-v.

60. Hale, *Discourse of the Knowledge of God*, I.v (p. 94).

61. Hale, *Discourse of the Knowledge of God*, I.v (p. 94).

62. Hale, *Discourse of the Knowledge of God*, I.v (p. 97).

63. Hale, *Discourse of the Knowledge of God*, I.vi (p. 99).

echoes the approach to Scripture as Word of God found in Calvin's *Institutes* and the works of other Reformers, albeit with a clearer relation to his epistemology, as presented in his initial chapter.

Hale returns to the issue of the nature of human understanding, now with a view to arguing that there are several ways of attaining assent to truth. There is, in the first place, an "inherent assent" to "connatural" or self-evident principles. This fundamental, inherent assent reflects Hale's approach to implanted or simply acquired principles as common notions.⁶⁴ Such assent is so basic that it belongs to the very nature of human beings, such as assent to such notions as when two things are both equal to a third thing they must be equal to each other, and so forth. This inherent assent does not apply to the proposition, "That the Old and New Testament, are the Word of God."⁶⁵

A second kind of assent is to knowledge gained by demonstration or, as Hale also calls it *scientia per causam*, namely, knowledge gained by the clear relation of cause to effect. There are many truths found in Scripture that fall into this category—they are stated by Scripture but their truth can also be confirmed by rational demonstration. "That these Scriptures are the infallible Word of God," however, "is not naturally demonstrable."⁶⁶

The third kind of assurance indicated by Hale is "*Belief*, which is the taking up of a Truth upon the Testimony of him that asserts it." There are two elements to belief if it is to be firm: it must rest on "a firm and absolute persuasion" that what the author of the testimony affirms is true; and it must also rest on "a firm and clear Assent, That this is the Word of that infallible Author."⁶⁷ The two elements are reciprocal—the persuasion of truth arises from the admission that, if indeed, the testimony is the Word of God, it must be true since "the Author is demonstrably unquestionable";⁶⁸ and the assent that the testimony is in fact the Word of God "is wrought only by a secret and immediate work of the Power of God upon the Soul, and is as firm Assent, if not more firm, than Science it self."⁶⁹ In short, the testimony, if it is to be believed to be the Word of God must be self-authenticating—authenticated by the power of God or, as others would say, the internal testimony of the Spirit.⁷⁰ The firmness of this assent is comparable to *scientia*, since the divine power working on the soul has revealed the principial status of Scripture, rendering the absence of rational demonstration unproblematic inasmuch as all *principia*, by definition, are indemonstrable.

64. Hale, *Discourse of the Knowledge of God*, I.vi (p. 99); cf. Baxter, *A Treatise of Knowledge and Love*, 29, 32–33.

65. Hale, *Discourse of the Knowledge of God*, I.vi (p. 99).

66. Hale, *Discourse of the Knowledge of God*, I.vi (p. 99).

67. Hale, *Discourse of the Knowledge of God*, I.vi (pp. 99–100).

68. Hale, *Discourse of the Knowledge of God*, I.vi (pp. 99–100); note that this point is made explicitly by Bullinger, *Decades*, I.i (I, pp. 37–38).

69. Hale, *Discourse of the Knowledge of God*, I.vi (pp. 99–100).

70. Cf. Calvin, *Institutes*, I.vii.1, 4–5; with Bullinger, *Decades*, I.iv (I, pp. 85, 87).

The fourth and last kind of assent is “*Perswasion or Opinion*,” which is to say, assent “upon probable grounds.”⁷¹ Such assent does not rise to the level of belief or of knowledge, properly so-called, but only to a level of acceptance below both. This is not to say that persuasion or opinion is to be rejected. On the contrary, it stands as a lower level of assent that is neither inherent, nor based on demonstration or belief, that can nonetheless serve to affirm and strengthen both knowledge and belief. By way of example—not from Hale—the consensus of the church fathers was often viewed as yielding probable truths, a significant step lower than the direct testimony of Scripture but still worth attention.

In Hale’s view, the persuasion that Scripture is the Word of God can arise from a “concurrence, and multiplicity of Arguments.”⁷² These arguments also serve to illustrate the relationship between the natural theology that has preceded and the scriptural or supernatural theology that will follow in the course of Hale’s essay. Taking an argument from a long tradition extending back through the medieval scholastics to the church fathers, Hale indicates that Scripture enables the easy discovery of truths that have either been gained only by the most intense labor of the mind or that have eluded even the wisest of men. There has been, for example, endless and fruitless debate over “the first Matter, Its Eternity, Its undeterminateness ... concerning the Eduction of Forms ... and by what Agent; concerning the eternal succession and concatenation of Causes; concerning the beginning of Motion, especially of the Heavens,” and so forth—all ending in unsatisfactory conclusions and further dispute, caused by ignorance of the truth that can be readily found in the first chapter of Genesis.⁷³

Similarly questions concerning the order and preservation of creatures, the content and origin of the natural law, and the ongoing concurrence of contingent causes despite their seeming lack of interrelationship are all resolved “if we look into this Book of God.”⁷⁴ In addition, moreover to the resolution of questions arising from the natural order and the use of reason, Scripture also presents truths

concerning the Deity, the Will of God, the Fall of Man, and the Means of his Restauration ... that cannot be collected or concluded by any natural Reason, partly in respect of the sublimity of their nature, being beyond the Verse of Sense and natural Discourse; partly because they are Emanations of a free Agent, whereof no other Reason can be given, but the Will of the Agent, and consequently, not deducible into Knowledge or Assent, by rational Conclusions.⁷⁵

Persuasion of these last truths that lie beyond the capabilities of human reason arise, however, from the fact that although reason cannot elicit them, they are nonetheless

71. Hale, *Discourse of the Knowledge of God*, I.vi (p. 100).

72. Hale, *Discourse of the Knowledge of God*, I.vi (p. 100).

73. Hale, *Discourse of the Knowledge of God*, I.vi (pp. 100–101).

74. Hale, *Discourse of the Knowledge of God*, I.vi (p. 102).

75. Hale, *Discourse of the Knowledge of God*, I.vi (p. 105).

“not contrary to natural Reason.” Reason, in other words, does not argue against their truth: it is capable of no “positive opposition” nor it is constrained “by necessity of Reason to disassent to them.”⁷⁶ It is also the case that these higher truths of scriptural revelation

carry with them an admirable congruity and fitness (even in reason) one to another: and although apart they carry a great difficulty; yet look upon the whole System or Fabrick, every Truth supports, and as it were, gratifies another, and bears witness to it, not only in point of Prediction, *de qua infra*, but also in point of Congruity one with another. Thus the Fall of Man, and the coming of Christ, two Truths unimaginable by Natural Reason, bear witness one to another; and the Justice and Mercy of God bears witness to both.⁷⁷

4. Hale on theology, natural and scriptural.

Hale’s understanding of the process of knowledge from simple to complex apprehensions and conclusions, taken together with his approach to several levels of assent assumed, to borrow on words of Martin Luther, an agreement of “Scripture and right reason.” This agreement, in turn, provided Hale with the basis for presenting his theology in two forms—one “by the Light of Nature” and another “by the Sacred Scriptures.” Beyond this, in presenting both forms, Hale was able to show both the extent and the limitation of the relationship between natural reason and reasoned exegesis of Scripture.

His natural theology begins with the measured argument that even though God is not an object of sense perception and does not fall “immediately within the reach of our Understanding,” the human mind can “by the ascents and steps of Rational Discourse,” gather “so much ... as may leave an Atheist without excuse.” Apart from this rather standard statement of the basic apologetic use of natural theology, Hale’s argumentation is positive, without any stated adversary. As he later indicates, natural or rational argument also supports the arguments of Scriptural theology, showing the coherence of reason with belief and adding rational demonstration to biblical certainty. This latter rationale comports more with the style of Hale’s exposition than the largely apologetic purpose of various other natural theologies of the era.

The subjects treated in Hale’s presentation of natural knowledge of God are the existence and attributes of God, the works of God in creation and providence, the excellence of humanity above other creatures, the supreme end of humanity and the means of attaining it, and the “credibility” of the Sacred Scriptures. The second part of Hale’s treatment of the knowledge of God surveys truths revealed in Scripture and, significantly, returns to the topic of the essence and attributes of God and then, by way of a discussion of the eternal decree, comes to the topics of creation, providence, and

⁷⁶ Hale, *Discourse of the Knowledge of God*, I.vi (p. 105).

⁷⁷ Hale, *Discourse of the Knowledge of God*, I.vi (p. 106).

human nature, the latter three also treated previously in his natural theology. The reason for the duplication of topics is that “although it is deducible by natural Evidence,” the truth of God’s existence as declared by Scripture “is of singular use, was well for the speedy and easie discovery of it, as also for the ratifying and confirming of this Principle ... we may observe, that even in this fundamental Truth, That there is a God, where these and the like Instruction as are wanting, Men, that are naturally endued with the same Faculties of Reason and Understanding with us, have not, or not so clearly this Principle, as among Atheists and Pagans.”⁷⁸

Although both portions of the book begin with chapters on the existence and attributes of God, the chapters are quite different. In his natural theology, following a fairly traditional Peripatetic approach, Hale begins by identifying “the first and most Magisterial Truth in the World, on which all other truths depend” as “That there is a First Being and Cause of all other Beings.” This truth “is evident by clear Reason.”⁷⁹ There are, moreover, several ways of approaching the notion of God as first cause—either by showing the impossibility of an infinite succession of contingent causes, or from human experience, or from the impossibility of an infinity of successive motion.

Hale notes that “Either we must admit a First Cause, or else an actual infiniteness of *Succession of Causes*.” And there are several reasons why an infinite succession of causes is impossible. It is, in the first place, contradictory to claim that something is both infinite and successive inasmuch as the succession of causes implies a continual adding of new causes and effects—so that, by implication, the concatenation of causes that existed before must be shorter than the concatenation that will exist afterward, and accordingly is not actually infinite, unless one wants to argue that some physically existent concatenation can be “more infinite” than another. This, Hale specifies, “is impossible in *Nature*,” perhaps because he recognizes the possibility of differing theoretical infinities in number at the same time that he holds, with many of his contemporaries, that there cannot be an infinity of actual things. As Cromartie indicates, given that things exist in existing, finite quantities, an infinity of things is hypothetical, by way of a mental “multiplication or division of an existing quantity.”⁸⁰ In addition, Hale was wary of Cartesian argumentation which, among other things, assumed that atoms, identified by the Cartesians as corpuscles, were infinitely divisible—in contrast to other atomist theories of the era, notably that of Gassendi, that assumed atoms are indivisible.⁸¹ Hale subsequently applies much the same logic to deny an infinite succession of motions: the infinite sequence being impossible, there must have been a beginning, and the beginning implies a first cause, understood in this case as the first mover.⁸²

78. Hale, *Discourse of the Knowledge of God*, II.i. (p. 118).

79. Hale, *Discourse of the Knowledge of God*, I.i (p. 4).

80. Cromartie, *Sir Matthew Hale*, 143.

81. See Andrew Pyle, *Atomism and Its Critics: From Democritus to Newton*. London: Thoemmes Press, 1997), pp. 402–411, on the issue of divisibility or indivisibility of atoms.

82. Hale, *Discourse of the Knowledge of God*, I.i (p. 6); note the lengthier argument concerning the origin of motion, the first mover, and derived nature of the “immediate Principle

A second point, having affinity with Aquinas' "second way," is that "it is impossible that there should be an eternal dependance of Causes one upon another without a First, because the whole Collection of those causes taken all together must needs likewise be actually depending; and if so, then upon themselves; and that is impossible, for the immediate Cause of the Effect doth not depend upon its Effect, but immediately upon its Cause."⁸³ In other words, not only is an infinite sequence of contingent physical things impossible, the existence of an infinity of caused beings without some ultimate prior cause is also impossible: both infinite temporal and infinite ontological regress are ruled out.

By contrast with the natural theology, as Hale points out in his biblically grounded second discourse, Scripture simply teaches, directly, convincingly for belief, and without argument "That there is a God." Although the doctrine is "deducible by natural Evidence," the biblical declaration is requisite not only for "speedy and easie discovery" of the truth but also "for the ratifying and confirming of this Principle, as we may observe, even in Truths of an inferiour nature," given that many who are endowed with reason fail to use it to draw the correct theistic conclusion.⁸⁴ This approach indicates quite clearly that Hale did not view his natural theology as a prologue to or foundation for his sacred theology: the biblical declaration of God that God exists stands on its own—as is evident both from the form of Hale's presentation of the biblical teaching and from his earlier epistemological premises concerning the sources of principal truths and the grounds of assent.

In both discourses, discussion of divine attributes follows directly on the proof or declaration of the existence of God. A comparison of the two lists demonstrates Hale's point that Scripture offers truths beyond the grasp of reason—and serves to modify Cromartie's conclusion that once Hale established the existence of the first cause, he "gave it all the qualities of the usual Christian God."⁸⁵ Hale only deduced some of the qualities or attributes of God from the idea of the First Cause. Specifically, Hale's natural theology identified God as eternal, immense, indivisible, simple, perfect, free, most just, good, and immutable—while the revealed theology repeats these attributes, now with biblical confirmation and adds unity, self-sufficiency, omniscience, omnipotence, wisdom, and irresistibility. In addition, Scripture teaches the mystery of the Trinity, a truth "that is not attainable by all the Reason in the World."⁸⁶

There are also significant differences in the way that Hale presents and argues the attributes. In the natural theology, they all arise from consideration of that "Magisterial Truth" of the First Cause. A first cause is not limited or "bounded" in its "existence or

of Motion" in created beings in Hale's *Observations Touching Principles of Natural Motions*, 1–7.

83. Hale, *Discourse of the Knowledge of God*, I.i (pp. 4–5); cf. Aquinas, *Summa theologiae*. Ia, q. 2, a. 3, corpus.

84. Hale, *Discourse of the Knowledge of God*, II.i (pp. 117–118); the argument is very similar to Baxter: see Sytsma, *Richard Baxter and the Mechanical Philosophers*, 94, 98–99.

85. Cromartie, *Sir Matthew Hale*, 144.

86. Hale, *Discourse of the Knowledge of God*, II.i. (p. 122).

being” by either duration or extension. Removal of these limits from one’s understanding of the first cause yields two attributes: “exclusion of the bounds of Existence in Duration is Eternity; that in Extension is Immensity.”⁸⁷

First, Hale offers his conception of eternity as existence “without Beginning, without Succession, without End.”⁸⁸ Clearly, the first cause cannot have a beginning since that would imply that the first cause was brought into being by a prior cause, which would be contradictory. Nor does the Cartesian notion of God as *causa sui*, the cause of himself, bear scrutiny “for that were to suppose a pre-existence in himself to himself,” which Hale declares “repugnant” to good sense.⁸⁹

More space is devoted to the conception of God’s eternity as being without succession. The argument denies temporality in God but, as is the case with most Reformed orthodox expositions of the doctrine of God, not duration: “The First Being hath a co-existence with the Successive Motions of the creatures, but his duration is not measured by it, or co-extended with it, but is of the same indivisibility as if there had been no successive motions produced, and consequently no successive time.”⁹⁰ The issue here is that successive motion, the measure of which is time, belongs to the order of created being and implies both divisibility and measurability—the measure being time. But God, as first and without beginning, must also be both indivisible and immeasurable. (In Hale’s understanding, as also for his Reformed contemporaries, divisibility is a characteristic of finite, composite being—and that which is composite cannot be absolutely prior and without beginning.)

Prior to and apart from the creation of the world with its successive motion, there is no succession and no time. The creation of finite, successive beings, and with them a before and an after, past present and future, “did not alter the indivisible nature of that duration, which that indivisible being had before, and at, and with that motion, which he after produced.”⁹¹ Duration, namely, continued existence, is a property both of God and of the world—but, again, given the priority, uncaused, and beginningless nature of God, the divine duration is eternal and without succession, whereas the duration of creatures is temporal, temporally limited, and successive.

The third corollary of the divine eternal duration, as distinct from creaturely temporal durations, is that it is “without end.” Hale’s first argument against God having an end is stated in almost cryptic fashion as a question: “what should or can determine his being, in as much as all things else are his productions, and cannot have any causality upon him?”⁹² The argument implied by the question is that finite, contingent things are determined in their being—determined by some cause beyond them—to particular ends or goals. Since God is the first cause, there can be no

87. Hale, *Discourse of the Knowledge of God*, I.i (p. 7).

88. Hale, *Discourse of the Knowledge of God*, I.i (p. 8).

89. Hale, *Discourse of the Knowledge of God*, I.i (p. 8).

90. Hale, *Discourse of the Knowledge of God*, I.i (p. 8); cf. the discussion in *PRRD*, III, 4.4, D.3–4.

91. Hale, *Discourse of the Knowledge of God*, I.i (p. 8).

92. Hale, *Discourse of the Knowledge of God*, I.i (p. 9).

determination of an end or goal for God, whether temporal or ontological: as first, God is also the determiner of the ends of all things and himself their ultimate end. It is also the case that having an end is “inconsistent with eternity” which is “a permanent and fixed indivisible” that includes all time, past present and future, but has no succession in itself. Like succession, “end” is a characteristic of temporal things—and it also implies having a beginning.⁹³

A series of similar arguments follow, arguing that the conception of the first cause implies a threefold “immensity,” specifically, “*Exemption from Circumscription ... Omnipresence and Exemption from Succession or Division of Parts.*”⁹⁴ Thus, the first cause is also recognized to be indivisible, given, among other issues, that it is incorporeal and one, a perfect unity. Its oneness follows simply from the fact that it is first and that there cannot be two or three first causes, two or three infinities, given that each one would limit the other and have “bounds” to its being—and bounds or limits are the result of being caused.⁹⁵ Divine simplicity and perfection also follow inasmuch as “Composition is inconsistent with a First Cause” and a first cause must also, as first and not brought into being by another, be fully actualized.⁹⁶

When he comes to the discussion of the divine attributes in his scriptural theology, Hale begins by noting that Scripture clearly presents the essence, nature, and attributes of God “as far forth as is comprehensible by our human Understanding” and also taught more clearly, without human error, and with firmer grounds for assent than they are inferred by reason—by implication, more clearly and correctly than Hale himself has argued some of the attributes on the basis of reason and more fully inasmuch as Scripture provides teaching concerning attributes that are not accessible to reason (and were not noted in the course of Hale’s natural theology).

Scripture explicitly teaches the unity, self-sufficiency, immensity, ubiquity, eternity, omniscience, omnipotence, wisdom, will, irresistibility, invisibility, and immutability of God, plus the truth that God is “the End of all he doth,”⁹⁷ all of which Hale simply documents with biblical texts. What is more important to his scriptural theology than further exposition of individual attributes is divine transcendence and the accommodated character of Scripture. God cannot be known in himself and his essence cannot be understood, given that God is infinite “and nothing besides himself hath, or can have, an Act of his Intellect, spacious enough to comprehend what is actually Infinite.”⁹⁸

This issue of the ultimate incomprehensibility of God and the absence of proportion between Creator and creature yields difficulties of predication in and for natural theology. Some attributes, accordingly, are expressed as negatives that exclude the “deficiencies that we find in Creatures.” Others affirm in God in a more excellent

93. Hale, *Discourse of the Knowledge of God*, I.i (p. 9).

94. Hale, *Discourse of the Knowledge of God*, I.i (pp. 10–11).

95. Hale, *Discourse of the Knowledge of God*, I.i (p. 11).

96. Hale, *Discourse of the Knowledge of God*, I.i (pp. 13–14).

97. Hale, *Discourse of the Knowledge of God*, II.i (pp. 118–119).

98. Hale, *Discourse of the Knowledge of God*, II.i (p. 119).

way attributes that are valued in people, such as justice, wisdom, and purity—and still other attributes reference “qualities” that, in human beings, relate to actions and affections, such as jealousy, anger, love, and pity. The negative attributes fall short of clearly expressing the essence of God and the other attributes, particularly those that belong to the category of affections are only with difficulty related to “the Perfection, Impassibility, and Immutability of his Essence.”⁹⁹ Scripture, however, not only provides testimony to all of these attributes, it also “provides Cautions to avoid grossness and mistakes” in understanding, cautions that specifically indicate the limits of human understanding and the fact that such teachings as the essence, attributes, and Trinity of God must ultimately remain mysteries that are not “attainable by all the Reason in the World.”¹⁰⁰

Hale’s doctrine of the divine decrees also provides a clear sense of the distinction between natural and sacred theology inasmuch as Hale views the doctrine as accessible only by way of biblical revelation, albeit capable of rational exposition, and therefore treats it only in his discourse on scriptural theology. It has no parallel in his natural theology, which moves directly from his doctrine of God as first cause to his doctrine of creation. But the doctrine does have an impact on Hale’s understanding of movement and change in the natural order, an issue on which he differed quite pointedly with the Epicurean or Gassendian version of the mechanical philosophies of his time, which as Cromartie points out “accounted for every phenomenon in terms of efficient causation, exerted by motions of merely material things.”¹⁰¹ Rather the motions in the world order are grounded in the divine disposition of both means and ends, specifically “according to that Law, that he hath given to its particular Being.”¹⁰² Natural law, in other words, is not to be understood solely as an ordering deducible from the regular motion of natural objects, but ultimately as “Rules or Laws” appointed by God “to be constant in Nature.”¹⁰³ In arguing his point, Hale has not given up on the traditional Aristotelian conception of final causality as Cromartie argues, rather he has drawn out the Christianized version of the conception, in which the first efficient is the determiner of ends of all things, into relation with a view of Natural Law that had become prominent in the science of his day.

In the natural theology, the transition from the doctrine of God to the doctrine of creation is the logical movement from cause to effects or from teaching concerning the *ad intra* or immanent divine will and power to “the *Emanent Acts of his Will and Power*.” Inasmuch as God has been shown to be the “First Being” and “First Cause” it follows that “all things besides him must have their being and subsistence from him.”¹⁰⁴ As a corollary of this truth, it should be clear that since “all things except the first Cause had a beginning of their being” there was also no “eternal matter” out of

99. Hale, *Discourse of the Knowledge of God*, II.i (p. 121).

100. Hale, *Discourse of the Knowledge of God*, II.i (p. 122).

101. Cromartie, *Sir Matthew Hale*, 196.

102. Hale, *Discourse of the Knowledge of God*, II.i (p. 129).

103. Hale, *Discourse of the Knowledge of God*, II.i (p. 129).

104. Hale, *Discourse of the Knowledge of God*, I.ii (p. 27).

which individual things were made—ruling out the Aristotelian assumption of the eternity of materiality. Similarly, this initial production of things by God was necessarily “by way of Efficiency; and not by derivation of substance from himself” since such a derivation is impossible: the divine essence is immaterial and indivisible—ruling out a Neo-Platonic or other forms of pantheism. This initial creative act, moreover, is different from any subsequent creation of things: it was an “infinite motion ... from a simple non-being to a being, and therefore was acted immediately by the Infinite Power and Will of the First Cause, there being no instrument to be used.”¹⁰⁵ The point that this was an “infinite motion” is important to the traditional explanation of creation from nothing, inasmuch as it acknowledges that, in the world order as we know it, it is quite correct to argue that nothing can be made from nothing, given that there is an infinite distance between utter nothingness and the existence of something. The creation of something from nothing is an infinite motion that can only be accomplished by an infinite power. Against the Epicureans of the era, Hall comments that the theory that the “irrational substances” that make up the world could have gathered themselves together is shown to be erroneous by the very order of the world, which could only be the product of the “First Being,” shown to be infinite in understanding as well as will.¹⁰⁶

By contrast, the chapter on creation in Hale’s scriptural theology begins by making the transition between the eternal decree and creation by noting that the “execution” of the decree or counsel of God consists in the two “transient Acts” of creation and providence. By contrast with the natural theology, the argument here begins with Genesis 1:1 and Hebrews 11:3, the latter text, in Hale’s view, clearly teaching a creation *ex nihilo* or has he puts it *a non esse ad esse*. An act of faith, he notes, is required to believe this truth, although, as shown in his natural theology, it is also a legitimate “conclusion of Reason” resting on “the impossibility to have any eternal subsistence but one.”¹⁰⁷ The difference between the biblical revelation and purely natural knowledge lies in the fact that “this truth, though it be deducible by necessity of Reason, if a God be once admitted, yet so infinite is the distance between Nothing and a Being, that dives of the acutest Naturalists were ignorant of it; the ignorance of which Principle causes many of their absurd and unintelligible Positions and Superstructions ... which by this Truth only are avoided.”¹⁰⁸

The Genesis account also provides Hale with a traditional two-stage approach to creation, first the creation of “the indigested matter of the Heavens and the Earth,” followed by “calling out the particular Subsistences, and furnishing of them with forms and qualities.”¹⁰⁹ This second or mediate creation identifies the production of things under “two Expressions,” namely, “the motion of the Spirit of God upon the face of the Waters” and the divine “Word of Command: *Let there be....*” what interests

105. Hale, *Discourse of the Knowledge of God*, I.ii (p. 28).

106. Hale, *Discourse of the Knowledge of God*, I.ii (p. 29).

107. Hale, *Discourse of the Knowledge of God*, II.iii (p. 145).

108. Hale, *Discourse of the Knowledge of God*, II.iii (p. 145).

109. Hale, *Discourse of the Knowledge of God*, II.iii (p. 146).

Hale here is that although the power of God is such that he could have willed all things into existence by one “instantaneous act,” he did not but worked successively first creating matter that would be suited to the things to be produced from it, then situating the elements, the heavens, and individual creatures in such a way that “every things serves to accommodate and fir the other,” and then “*planting in every thing a radical Activity and Causality*, by which it moves.”¹¹⁰

This last comment, concerning the implanted “radical Activity and Causality” in creatures also represents Hale’s encounter with the science of the era. As already noted, he opposed the mechanical philosophy of Gassendi with its self-moved atoms and set against it a concept of divinely imposed natural law according to which the movements of all things were initiated and ordered by God. Here he adds a different dimension, acknowledging vital forces in things themselves, also implanted in them by God in their creation, an issue on which he elaborated elsewhere in his *Observations Touching Principles of Natural Motions*, again in opposition to Gassendi but also modifying the traditional distinction between substance and accident to add from van Helmont the notion of a third aspect of each thing, an active power or “*virtus activa*, superadded to Matter,” defined now not simply as “substantial form” but as a principle of “Live, Vigor, Activity, and Motion” that are essential to the individual thing.¹¹¹ These *vires* or *virtutes activae* are to be understood in two ways—first as *virtutes essentiales*, that are the principal Constituents of vital or substantial Forms” and second as “active qualities ... of a lower order” such as heat and gravity.¹¹²

The reasons for Hale’s interest in these active powers are the contemporary scientific interest in heat, gravity, and magnetism and also his opposition to alternative explanations of movement in the created order, not only from Gassendi but also from Platonists who hypothesize a kind of demiurgic mediating being or power, the world soul (*anima mundi*) or spirit of nature (*spiritus naturae*). The notion of a world soul, Hale views as theologically problematic and also scientifically useless—better to explain the motions in the world order on the basis of the pattern of God’s creation and the examination of the natural order itself.¹¹³

By way of conclusion, Matthew Hale’s discourses on natural and scriptural theology, taken in the context of his work on a series of related issues in natural philosophy and law, offer insight into one of the ways that an early modern writer in a Reformed context could examine issues of human knowing, scientific and religious, based on reason, nature, and scripture, and draw them out into a fairly coherent approach to the interrelationship and the distinction of reason and faith, natural and biblical revelation. He did not view natural theology as a necessary foundation on

110. Hale, *Discourse of the Knowledge of God*, II.iii (p. 147); note the specific identification of these two creative works as *creatio prima* and *creatio secunda* in Matthew Hale, *Concerning the Works of God*, in his *Contemplations Moral and Divine*, 3 vols. (London: William Shrowsbury, 1677-1700), III, pp. 134, 142–143.

111. Hale, *Observations Touching Principles of Natural Motions*, pp. 8–9.

112. Hale, *Observations Touching Principles of Natural Motions*, pp. 9, 16–17.

113. Hale, *Observations Touching Principles of Natural Motions*, pp. 9, 17–18; 25–35.

which one could build a supernatural theology—rather he understood it to be the reverent result of the investigation of the world by natural philosophy, an *a posteriori* rational theism that would emerge from their discernment of order and finality in the universe. Hale argues two disciplines in significantly different ways, including different approaches in doctrinal topics that are shared by natural and supernatural theology—and he viewed them as supplementary in the sense that both presented the same ultimate truths in those places where the disciplines overlapped as, for example in the doctrines of God, the divine attributes, and creation.

Hale's model represents an approach fitted to the context of the second half of the seventeenth century, appreciative but still critical of developments in early modern science, particularly as found in the work of thinkers like Robert Boyle, intent on building an eclectic but coherent theory of knowledge that included both natural and supernatural truths, setting boundaries to the natural, but also recognizing, as various contemporary theologians were ready to point out, that supernatural revelation does not destroy natural knowledge—rather it includes it, corrects it, and provides an ultimate framework within which it can not only be understood but also brought to a religious and moral use.¹¹⁴ Arguably, although different in detail, his approach to natural and scriptural theology was fairly representative in this day on the broader issues of the limits of natural knowledge, the positive place of natural knowledge within Christian thought, the necessity that theology remain abreast of developments in other disciplines, and the ultimate agreement of the truths in philosophy with the truths in theology.

114. E.g., Turretin, *Institutio theologiae elencticae*, I.iii.10.